

AUTOPROTECTED OPTICAL COMMUNICATION RING NETWORK

ABSTRACT OF THE DISCLOSURE

An autoprotected optical communication ring network is disclosed. The ring network includes two optical carriers that are arranged for bidirectional transmission. Multiple optically reconfigurable nodes are connected along the optical carriers. The nodes communicate in pairs, defining non-overlapping working links. Under normal conditions, the nodes of each pair are optically configured to exchange optical signals over the working link at a first wavelength on the first carrier and at a second wavelength that is different from the first wavelength on the second carrier. During a failure condition, the first wavelength on the second carrier and the second wavelength on the first carrier are reserved for effecting a protection scheme, while the first wavelength on the first carrier and the second wavelength on the second carrier can still be used for unaffected working links.